

## CCP13: The 13th UK Annual Fibre Diffraction and Non-Crystalline Diffraction Conference

ILL/ESRF 2-5th June 2004

The 13th CCP13 conference - the UK Annual Fibre Diffraction and Non-Crystalline Diffraction meeting was held at the ILL/ESRF on 2-5th June 2004. One of the central themes was the combined use of X-ray and neutron scattering studies. The meeting turned out to be extremely popular - registration had to close when the number of delegates reached 105. There was wide representation from the UK fibre diffraction and solution scattering community, as well as from a large number of laboratories throughout Europe, and of course from the laboratories on the Grenoble site. Delegates were welcomed by the ILL and ESRF Directors, Colin Carlile and Bill Stirling, who described the range of facilities relevant to this community that are available on the site. They also emphasised that these facilities receive major funding from the UK and that the CCP13 user community should see them as available to them in the same way that other UK-funded facilities such as SRS and ISIS. Both Directors emphasised the importance of the new PSB (Partnership for Structural Biology) that is being built as part of a collaboration between ILL, ESRF, EMBL and IBS. The PSB building, which will also incorporate the new Institute of Molecular Virology, will be complete in about 12 months time, and will offer unparalleled facilities for interdisciplinary research in biology.

The conference presentations were excellent. Svergun (EMBL), Perkins (UCL London), Lawrence (KCL London), Hartlein (ILL), Timmins (ILL) and May (ILL) described the application of X-ray and neutron solution scattering as well as the potential available through deuteration methods. Callow (ILL/Keele) described his EPSRC-funded work in collaboration with Kneale (Portsmouth) on the application of these methods to the study of type I restriction-modification. Zaccai (IBS, Grenoble) gave an exciting presentation on a small angle scattering analysis of incoherent elastic neutron scattering to study dynamics. In the area of partially ordered systems there were also some excellent presentations on muscle from Irving (Illinois), Squire (Imperial), Irving (KCL), Ferenczi (Imperial), Wakabayashi (Japan), and Yagi (Japan). Stubbs from Vanderbilt described fibre diffraction work on flexible filamentous viruses and Kirschner (Boston) described recent advances in the study of amyloid fibrils using fibre diffraction. Riek (ESRF) spoke about SAXS/WAXS and neutron studies of spider silk, and Mueller (Kiel) gave a talk on combined x-ray and neutron work on native cellulose. While many of

the presentations were biologically inclined, there were also presentations on carbon nanotubes from Crawshaw

(Cambridge), one on novel experiments at the ESRF for the study of smectic liquid crystals in an electric field (Bras, ESRF), and also two from Sheffield - one by Zeng about a SANS study of transient phases in polymer crystallization and another by Heeley about scattering studies of micropolymer processing. Nick Terrill described developments foreseen at Diamond and led a discussion of the priorities for future development at Diamond.

On the analytical/computational side there were presentations from Hammersley (ESRF) about likely future directions for software, from Ma (Baylor) about fibre diffraction refinement, and from Millane (Canterbury, New Zealand) who described methods for the analysis of myosin superlattice structure in striated muscles.

The quality of the posters was truly outstanding - congratulations to Katerina Papanikolopoulou (IBS) for her poster entitled *Amyloid fibril formation from sequences of a natural beta-structured fibrous protein: the adenovirus fibre* and to Jozef Keckes (Leoben) for his entitled *In situ WAXS studies of structural changes in wood foils and individual wood cells during microtensile tests*. Each won CCP13 poster prizes (£250) that were presented at the conference dinner at the Chateau de Sassenage.

Twenty six people stayed for the excursion to the spectacular *Grottes de Choranche* and (for the wine inclined) Tain L'Hermitage.

Trevor Forsyth  
Institute Laue Langevin  
Grenoble, France



Trevor Forsyth (right), the local organiser of the Grenoble Workshop, clarifying a point with Tom Irving at the pre-Dinner reception at the Chateau de Sassenage.

